AMENDMENT TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

1.   (Currently Amended) A method for ~~sending~~ multicasting ~~video and audio~~ data through a network in real-time, the method comprising the computer-implemented acts of:

~~sending~~ multicasting said ~~video and audio~~ data ~~in uncompressed form~~ through said network[[;]] in real-time or near real-time using a ~~multicast~~ bi-directional delivery protocol (BDP); ~~for sending said video and audio data for sending said video and audio data; and~~

passing corrective data through the network via the bi-directional delivery protocol; and

~~using~~ performing ~~an~~ error correction to reduce packet loss using checksums when ~~sending~~ multicasting said ~~video and audio~~ data; [[.]]

wherein, said data comprises video data that is multicasted through the network in uncompressed form; and

wherein, said using said bi-directional delivery protocol (BDP) comprises sending a binomial TCP forward packet and a simple UDP backwards packet.

2.   (Currently Amended) The method of claim 1, further comprising: ~~A method of transferring data comprising:~~

~~receiving~~ multicasting at least a portion of the data to ~~a first video data stream at~~ a first destination ~~first~~ machine;

sending a signal to a checksum point to request a data packet of the data that is missing from the at least a portion of the data received at the first destination machine.

~~multicasting the first video data stream in uncompressed and raw form through a network;~~

~~receiving the first video data stream at a second machine; and~~

~~playing the first video data stream on the second machine.~~

3.   (Currently Amended) The method of claim [[2]] 1, wherein, the data comprises live updates to a sporting event. ~~wherein: the first video data stream includes audio data.~~

4.   (Currently Amended) The method of claim 2, further comprising:

receiving a checksum result at the first destination machine; and

determining a list of data packets that are missing from the at least a portion of the data received at the first destination machine using the checksum result.

~~the first video data stream at a third machine; and~~

~~playing the first video data stream on the third machine.~~

5.   (Currently Amended) The method of claim [[4]] 2, further comprising:

~~receiving~~ further multicasting the data to ~~first video data stream at a fourth~~ a second destination machine. [[;]] ~~and~~

~~playing the first video data stream on the fourth machine.~~

6.   (Currently Amended) The method of claim [[2]] 5, further comprising

~~receiving a second video data stream at the second machine;~~

multicasting the data ~~second video data stream in uncompressed and raw form~~ through the network from the second destination machine; and

receiving the data ~~second video data stream~~ at the destination ~~first~~ machine. ~~; and~~

~~playing the second video data stream on the first machine.~~

7.   (Currently Amended) The method of claim [[6]] 5, further comprising:

using a multicast global listener (multicast GL) between the first and second destination machines to correct for packet loss;

wherein, the first destination machine sends the data to the second destination machine and the second destination machine sends the data to the first destination machine.

~~receiving the second video data stream at a third machine; and~~

~~playing the second video data stream on the third machine.~~

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8.   (Currently Amended) The method of claim 7, wherein, the multicast GL is implemented in, one or more of, TAPI 3 and IGMPv3. further comprising:

~~receiving the first video data stream at the third machine; and~~

~~playing the first video data stream on the third machine.~~

9.   (Currently Amended) The method of claim 2, further comprising:

performing a multi-client web browsing session;

wherein, ~~selecting~~ a ~~website~~ browser at the first destination machine [[;]]

~~displaying the website~~ is locked to a browser at the ~~first~~ second destination machine [[;]] and displays ~~displaying~~ the same website as that displayed at the second destination machine.

10.   (Currently Amended) The method of claim [[9]] 1, wherein, the data includes audio data. ~~further comprising: displaying the website at a third machine.~~

11.   (Currently Amended) The method of claim 10, wherein, the audio data is uncompressed. ~~further comprising:~~

~~receiving the first video data stream at a third machine; and~~

~~playing the first video data stream on the third machine.~~

12.   (Cancelled)

13.   (Currently Amended) The method of claim [[2]] 1, wherein: the network is a local area network or wide area network.

14.   (Currently Amended) The method of claim [[2]] 1, wherein: the network is the internet or an intranet.

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15.   (Currently Amended) The method of claim [[2]] 1, wherein: the network is a wireless network. ~~the network is a wide area network.~~

16.   (Currently Amended) The method of claim 2, wherein: <u>the first destination machine is a wireless phone.</u> ~~the network is an intranet.~~

17-66. (Cancelled)

67.   (New) A method for <u>multicasting video</u> data through a network <u>in real-time to provide live updates to a sporting event</u>, the method comprising the computer-implemented acts of:

        multicasting said video data through said network using a bi-directional delivery protocol (BDP), the video data being multicasted through the network in uncompressed form;

        performing error correction to reduce packet loss using checksums when multicasting said video data;

        wherein, said using said bi-directional delivery protocol (BDP) comprises sending a binomial TCP forward packet and a simple UDP backwards packet; and

        wherein, said video data comprises the live updates to the sporting event.

68.   (New) The method of claim 67: wherein, the live updates to the sporting event are multicasted to a wireless phone.

69.   (New) The method of claim 67: wherein, the network is a wireless network.

70.   (New) A system for video conferencing using a multicast signal to send video data in a many-to-many network configuration <u>in real-time</u> among a set of client machines, comprising:

a login server to process requests of each user in a multicast queue to join a video conference via a multicast stream that transmits the video data, the video data being uncompressed;

wherein, the login server connects to the set of client machines using a TCP winsock connection;

a profile server coupled to the login server, the profile server verifies an identity of a requesting user;

a registry server coupled to the profile server;

wherein, the registry server is operable to retrieve information about the requesting user whose identity has been verified by the profile server and to provide communications data for the requesting user to connect to the video conference through the multicast stream.

71.   (New) The system of claim 70:

wherein, the login server further identifies a request for a new transaction among the requests from each user to join the video conference;

wherein, the registry server is operable to receive user information of a user of the request for the new transaction whose identify was not verified by the profile server.

72.   (New) The system of claim 70: wherein, a client machine of the requesting user has an open port operable to receive a multicast signal for connecting to the video conference.

73.   (New) The system of claim 70: wherein, the video data is sent at a data rate that matches a client machine among the set of client machines having the largest bandwidth.

74.   (New) The system of claim 70, wherein, the set of client machines comprises a Web TV system.

75.   (New) The system of claim 70, wherein, the set of client machines comprises a wireless phone.

76.   (New) A computer-implemented method of live video conferencing between multiple participants using multiple client machines through a network, comprising:

establishing a connection with an Internet Location Server (ILS) to request start of a video conference;

creating a multicast steam for the live video conference;

processing a request of a participant to join the live video conference;

verifying an identity of the participant;

in response to verification of the identity of the participant, retrieving information of the participant;

providing information related to the live video conference to the participant through the multicast stream to establish a connection between the participant and the multicast stream;

wherein, packet loss is corrected for using a multicast global listener (multicast GL) in the multicast stream between the plurality of participants.

77.   (New) The computer-implemented method of claim 76, wherein, network is a wireless network.

78.   (New) The computer-implemented method of claim 76, wherein, the participant requests to join the live video conference using a wireless phone.

79.   (New) The computer-implemented method of claim 76, wherein, the multiple client machines comprises a Web TV system.

80.   (New) The computer-implemented method of claim 76, wherein, the information of the participant includes communication data comprising, one or more of, communication ports and IP addresses.

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81.   (New) The computer-implemented method of claim 76, wherein, the multicast GL is implemented in, one or more of, TAPI 3 and IGMPv3.

82.   (New) A machine-readable medium having embodied therein instructions, which, when executed by a processor, cause the processor to perform a method for multicasting video and audio data through a network of a set of destination machines, the method comprising:

multicasting said video and audio data through said network using a bi-directional delivery protocol (BDP);

passing corrective data through the network via the bi-directional delivery protocol; and

performing error correction to reduce packet loss using checksums when said video and audio data;

wherein, said video and audio data is multicasted through the network in uncompressed form; and

wherein, said using said bi-directional delivery protocol (BDP) comprises sending a binomial TCP forward packet and a simple UDP backwards packet.

multicasting at least a portion of the video and audio data to a first destination machine;

sending a signal to a checksum point to request a data packet of the video and audio data that is missing from the at least a portion of the video and audio data received at the first destination machine.

receiving a checksum result at the first destination machine; and

determining a list of data packets that are missing from the at least a portion of the video and audio data received at the first destination machine using the checksum result.

83.   (New) The method of claim 82, further comprising,

further sending the signal to a plurality of checksum points; and

requesting, from the plurality of checksum points, data packets that are missing from the

at least the portion of the video and audio data received at the first destination machine.

84.   (New) The method of claim 82, further comprising:

further multicasting the video and audio data to a second destination machine.

85.   (New) The method of claim 84, further comprising

multicasting the video and audio data through the network from the second destination

machine; and

receiving the video and audio data at the first destination machine.

86.   (New) The method of claim 85, further comprising:

using a multicast global listener (multicast GL) between the first and second destination

machines to correct for packet loss;

wherein, the first destination machine sends the video and audio data to the second

destination machine and the second destination machine sends the data to the first destination

machine.

87.   (New) The method of claim 86, further comprising, using an email to multicast the video

data; wherein, the email is converted for transmission without compression using the multicast

GL.

88.   (New) The method of claim 87, wherein, the email comprising the video data is

transmitted through the network using approximately 2Kb sized pieces of information.

89.   (New) The method of claim 86, wherein, the multicast GL is implemented in, one or

more of, TAPI 3 and IGMPv3.

90.   (New) The method of claim 82, further comprising:

performing a multi-client web browsing session;

wherein, a browser at the first destination machine is locked to a browser at the second destination machine and displays the same website as that displayed at the second destination machine.

91.   (New) The method of claim 82, wherein, the audio data is uncompressed.

92.   (New) The method of claim 82, wherein, the video data is uncompressed.

93.   (New) The method of claim 82: wherein, the network is a one-to-many network and the multicast stream is established from an outermost destination machine in the set of destination machines in the one-to-many network configuration.

94.   (New) The system of claim 91: wherein, the client machine sends the video data to an adjacent client machine and the adjacent client machine sends the data to the client machine to correct for packet loss in the one-to-many network configuration of video conferencing.

95. (New) A computer-implemented method for multicasting video and audio data through a wireless network in real-time or near real-time, comprising:

multicasting said video and audio data through said network using a bi-directional delivery protocol (BDP);

performing error correction to reduce packet loss using checksums when multicasting said video and audio data;

wherein, said using said bi-directional delivery protocol (BDP) comprises sending a binomial TCP forward packet and a simple UDP backwards packet.

multicasting at least a portion of the video and audio data to a first destination machine;

sending a signal to a checksum point to request a data packet of the video and audio data that is missing from the at least a portion of the video and audio data received at the first destination machine;

receiving a checksum result at the first destination machine;

determining a list of data packets that are missing from the at least a portion of the video and audio data received at the first destination machine using the checksum result; and

further multicasting the video and audio data to a second destination machine.

96. (New) The computer-implemented method of claim 95, wherein, video and audio data comprise live updates to a sporting event.

97. (New) The computer-implemented method of claim 95, wherein, the first destination machine is a wireless phone.

98. (New) The computer-implemented method of claim 95, wherein, the second destination machine is a web TV system.

99. (New) The computer-implemented method of claim 95, wherein, the second destination machine is a computer.

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100.   (New) The computer-implemented method of claim 95, wherein, the audio data is uncompressed.

101.   (New) The computer-implemented method of claim 95, wherein, the video data is uncompressed.

102.   (New) A system for live video conferencing between a plurality of participants through a network utilizing a low-bandwidth and low-overhead protocol, comprising:

    means for, establishing a connection with an Internet Location Server (ILS) to request start of a live video conference;

    means for, creating a multicast steam for the live video conference;

    means for, processing a request of a participant to join the video conference;

    means for, verifying an identity of the participant;

    means for, retrieving information of the participant in response to verification of the identity of the participant;

    means for, providing information related to the live video conference to the participant through the multicast stream;

    wherein, packet loss is corrected for using a multicast global listener (multicast GL).

103.   (New) The system of claim 102, wherein, the network is a wireless network through which the plurality of participants can connect to the live video conference using wireless phones.

104.   (New) The system of claim 102, wherein, the information includes communication data comprising, one or more of, communication ports and IP addresses.

105.   (New) The system of claim 102, wherein, the multicast GL is implemented in, one or more of, TAPI 3 and IGMPv3.